# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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| Applicants: | Daniel G. Schweikert, John F. MacDonald | | |
| Assignee: | Sun Microsystems, Inc. | | |
| Title: | METAL REGION FOR REDUCTION OF CAPACITIVE COUPLING BETWEEN SIGNAL LINES | | |
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Monterey, CA
January 31, 2003

**CLEAN COPY OF REPLACEMENT CLAIMS**

Replace the pending set of claims in the above application with the following set of claims:

1. A structure comprising:
a first signal line;
a second signal line; and
a first shield line positioned between but separated from said first signal line and said second signal line, said first shield line being electrically floating.

2. The structure of Claim 1 wherein said first signal line, said second signal line and said first shield line are all part of a single conductor layer.

3. The structure of Claim 1 wherein said first signal line, said second signal line, and said first shield line are each in a different conductor layer.

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4. The structure of Claim 1 wherein said first shield line has an area sufficient to prevent said first shield line from causing capacitive coupling between said first signal line and said second signal line to be greater than if said first shield line was not present.

5. The structure of Claim 1 wherein said structure further comprises a second shield line electrically connected to said first shield line.

6. The structure of Claim 5 wherein said first shield line and said second shield line are part of a single conductor layer.

7. The structure of Claim 5 wherein said first shield line is part of a first conductor layer and said second shield line is part of a second conductor layer.

8. The structure of Claim 5 wherein said first shield line is electrically connected to said second shield line by an electrically conductive via.

9. The structure of Claim 8 wherein said via is provided at a natural intersection of said first shield line and said second shield line.

10. (AMENDED) A structure comprising:

a substrate;

a first signal line above said substrate;

a second signal line above said substrate, wherein unused substrate surface area exists between said first signal line and said second signal line; and

a first shield line in said unused substrate surface area, said first shield line being electrically floating.

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11. The structure of Claim 10 wherein a distance between said first signal line and said second signal line is at least equal to twice the minimum distance allowable between features plus the minimum allowable width of a feature.

12. The structure of Claim 10 wherein said first shield line has a width greater than the minimum allowable width of a feature.

14. The structure of Claim 10 wherein said first shield line has a first potion and a second portion, said first portion having a greater width than said second portion.

15. The structure of Claim 10 wherein said structure further comprises a second shield line electrically connected to said first shield line.

16. (TWICE AMENDED) A structure comprising:

a substrate;

a first signal line above said substrate;

a second signal line above said substrate, wherein unused substrate surface area exists between said first signal line and said second signal line;

a first shield line in said unused substrate surface area and;

a second shield line electrically connected to said first shield line, wherein said first shield line and said second shield line are part of a single conductor layer and wherein said first shield line and said second shield line are electrically floating.

17. The structure of Claim 15 wherein said first shield line is part of a first conductor layer and said second shield line is part of a second conductor layer.

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18. The structure of Claim 15 wherein said first shield line is electrically connected to said second shield line by an electrically conductive via.

19. The structure of Claim 18 wherein said via is provided at the natural intersection of said first shield line and said second shield line.

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on January 31, 2003.

Attorney for Applicants — January 31, 2003 Date of Signature

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